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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/800,175

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Chih-Tsung Lin

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EXAMINER

HIRL, JOSEPH P

ART UNIT

PAPER NUMBER

2129

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/800,175

Applicant(s)

LIN, CHIH-TSUNG

Examiner

Joseph P. Hirl

Art Unit

2129

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>A1</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to an AMENDMENT entered December 18, 2006 for the patent application 10/800175 filed on March 12, 2004.
2. The First Office Action of August 22, 2006 is fully incorporated into this Final Office Action by reference.

Status of Claims

- 3 Claims 1-24 are pending in this application.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-24 are rejected under 35 U.S.C. § 101 for nonstatutory subject matter. The computer system must set forth a practical application of § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77. The invention is ineligible because it has not been limited to a substantial practical application

In determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible, and concrete, but rather that the final result achieved by the claimed invention is useful, tangible and concrete. If the claim is directed to a practical application of the § 101 judicial exceptions producing a result tied to the physical world that does not preempt the judicial exception, then the claim meets the statutory requirement of 35 U.S. C. § 101.

The invention must be for a practical application and either:

- 1). specify transforming (physical thing – article) or
- 2). have the Final Result (not the steps) achieve or produce a
useful (specific, substantial and credible),
concrete (substantially repeatable / non unpredictable), and
tangible (real world / non abstract) result

(tangibility is the opposite of abstractness).

A claim that is so broad that it reads on both statutory and non-statutory subject matter, must be amended, and if the specification discloses a practical application but the claim is broader than the disclosure such that it does not require the practical application, then the claim must be amended.

Claims that define a hierarchy, couple implementation connectivity relationship, represent relationships, identify data targets, include a conceptual layer stored in a storage unit and include a logic layer coupled to the conceptual layer⁴ are non statutory.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Kasravi (USPubN 20040249829, referred to as **Kasravi**).

Claims 1, 10

Kasravi anticipates defining a hierarchy of interests in the semiconductor knowledge with data targets and results (**Kasravi**, Fig. 2; Examiner's Note (EN): ¶ 12. applies; semiconductor knowledge is descriptive terminology and not functionally distinct); storing the hierarchy of interest (**Kasravi**, ¶ 0014); developing a connectivity relationship diagram to reflect the dependency between the data targets and the results (**Kasravi**, Fig. 2); implementing the connectivity relationship diagram (**Kasravi**, Fig. 2); coupling the implemented connectivity relationship diagram with the stored hierarchy of interest (**Kasravi**, Fig. 2; ¶ 0014); identifying at least one data source for the data targets (**Kasravi**, ¶ 0038); and coupling the implemented connectivity relationship diagram to the at least one data source (**Kasravi**, Fig. 3; EN: a master logic diagram is simply a relationship diagram of Fig. 2).

Claim 2

Kasravi anticipates the connectivity relationship diagram represents physical, logical and uncertain relationships (**Kasravi**, Fig. 3; ¶0004, ¶0005).

Claim 3

Kasravi anticipates the connectivity relationship diagram is a dynamic master logic diagram (**Kasravi**, ¶0005; EN: such is the relationships (logic) set forth in Fig. 2).

Claim 4

Kasravi anticipates data source is a dynamic master logic diagram (**Kasravi**, ¶0005; EN: such is the relationships (logic) set forth in Fig. 2 and the related data).

Claims 5, 13, 19

Kasravi anticipates the data source is a legacy server (**Kasravi**, ¶0047).

Claims 6, 14, 20

Kasravi anticipates the legacy server data is accessed by an enterprise application integrator (**Kasravi**, ¶0045; ¶0046; ¶0047; EN: such is software; an integrator or application program will bind logical steps with a data source of a computer or server).

Claims 7, 15, 21

Kasravi anticipates the data source is a database (**Kasravi**, ¶0047).

Claims 8, 17, 24

Kasravi anticipates inferring states of the data targets from states of the results (Kasravi, ¶0006); and diagnosing a source of an anomaly in the data targets (Kasravi, ¶0006).

Claims 9, 16

Kasravi anticipates automatically updating the database with the results (Kasravi, ¶0043).

Claim 11

Kasravi anticipates a dynamic master logic diagram comprise of a conceptual layer, a logic layer and an implementation layer (Kasravi, ¶0003; EN: individual are the implementation layer, reporting assignments is the logic layer and communication patterns is the concept layer).

Claim 12

Kasravi anticipates the data source is a second dynamic master logic diagram (Kasravi, ¶0047; EN: such is the node/link database).

Claim 18

Kasravi anticipates at least one data source (Kasravi, ¶0047); a conceptual layer stored in a storage unit; and a logic layer coupled to the conceptual layer and at least one data source (Kasravi, ¶0047; ¶0003; EN: individual are the implementation layer, reporting assignments is the logic layer and communication patterns is the concept layer).

Claim 22

Kasravi anticipates manufacturing requirements documents are stored in the database (**Kasravi**, ¶0047; ¶0003; EN: manufacturing requirements documents are tools which would be stored in a database).

Claim 23

Kasravi anticipates an updating mechanism that updates the database with the changes in the conceptual layer(**Kasravi**, ¶0047; EN: such is new inferred knowledge).

Response to Arguments

7. The objection to the IDS is withdrawn.

8. Applicant filed a Declaration under 37 CFR 1.131 but has not discussed such filing in the remarks section of the response dated December 18, 2006.

Notwithstanding a limited reference, the subject declaration has been reviewed and considered but has been rejected for the following reasons. MPEP 715.07 cites: "The essential thing to be shown under 37CFR 1.131 is priority of invention and this may be done by any satisfactory evidence of the fact. FACTS, not conclusions, must be alleged. Evidence in the form of exhibits may accompany the affidavit or declaration. Each exhibit relied upon should be specifically referred to in the affidavit or declaration, in terms of what it is relied upon to show." The subject declaration at item 3., 4., and 5. do not have any supporting exhibits. While item 6. cites Exhibit A, pages 1 through 5, of

such exhibit was never executed by signature or date. Further, such pages address a Knowledge Slicing and Encapsulating Method in Expert System without any application to managing semiconductor manufacturing knowledge.

6. Applicant's arguments filed on December 18, 2006 related to Claims 1-24 have been fully considered but are not persuasive.

In reference to Applicant's argument:

In the present application, claims 1-17 are directed to a method of information management for semiconductor manufacturing and claims 18-24 are directed to a system for managing semiconductor manufacturing information. The management of semiconductor manufacturing information is not a law of nature or a natural phenomenon. Moreover, such information management is not an abstract idea. That is, claims 1-24 are not seeking to claim information management in general but a unique information management system and method applicable for semiconductor manufacturing information. As such, the claimed invention does not seek to cover every substantial practical application of information management. As such, it is believed that claims 1-24 are directed to statutory subject matter as defined by 35 U.S.C. § 101.

Examiner's response:

Simply the invention must limit to an output that is a practical application.

Methodology that merely couples information albeit via a diagram is simply not a result that is a practical application. Applicant should consider rewriting the independent claims such that there is an output of something for some specific practical application. Coupling the implemented connectivity relationship diagram to the at least one data source is abstract. 35 USC § 101 rejections apply.

In reference to Applicant's argument:

The Examiner also rejected claims 1-24 as being anticipated by Kasravi. There are numerous patentable distinctions between that claimed and that disclosed by Kasravi. For example, Kasravi fails to disclose a method for managing semiconductor manufacturing knowledge that includes "defining a hierarchy of interests in the semiconductor knowledge with data targets and results." The Examiner has asserted that the link diagram of Fig. 2 of Kasravi describes the claimed hierarchy of interests. However, the link diagram does not provide a hierarchy of interests. The link diagram shows the relationships between

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various informational objects. The relationship between the objects does not involve the ranking of the objects. In fact, Kasravi teaches that the purpose of the link diagram is to illustrate the various relationships between otherwise un-related objects, not to rank the objects. As such, the reference fails to teach or suggest that recited in the pending claims.

Examiner's response:

¶ 12. applies. Applicant is invited to review MPEP 714.02 concerning the appropriate response to an office action. The rejection under 35 USC 102(e) remains.

Examination Considerations

9. The claims and only the claims form the metes and bounds of the invention.

"Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

10. Examiner's Notes are provided with the cited references to prior art to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact

prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior art but a link to prior art that one of ordinary skill in the art would find inherently appropriate.

11. Unless otherwise annotated, Examiner's statements are to be interpreted in reference to that of one of ordinary skill in the art. Statements made in reference to the condition of the disclosure constitute, on the face of it, the basis and such would be obvious to one of ordinary skill in the art, establishing thereby an inherent prima facie statement.

12. Examiner's Opinion: ¶¶ 9. - 11. apply. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Claims 1-24 are rejected.

Correspondence Information

15. Any inquiry concerning this information or related to the subject disclosure should be directed to the Primary Examiner, Joseph P. Hirl, whose telephone number is (571) 272-3685. The Examiner can be reached on Monday – Thursday from 6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, David R. Vincent can be reached at (571) 272-3080.

Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,
Washington, D. C. 20231;

Hand delivered to:

Receptionist,
Customer Service Window,
Randolph Building,
401 Dulany Street,
Alexandria, Virginia 22313,

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(located on the first floor of the south side of the Randolph Building);

or faxed to:

(571) 273-8300 (for formal communications intended for entry.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).



Joseph P. Hirl
Primary Examiner
March 1, 2007